REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of January 27, 2005 and the Advisory Action of April 27, 2005.

Reconsideration of the Application is requested.

The Office Action

Claims 1, 2, 5-7, 16 and 21-31 are in the application.

Claims 1, 2, 5-7, 16 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 2, 5-7, 16 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 1, 2, 5-7, 16 stand rejected under 35 U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Wagner (U.S. Patent No. 6,670,599).

Claims 3-4, 8-15 and 17-22 have been canceled.

Claims 21-31 have been added.

Non-Art Rejections

Applicants respectfully traverse the rejection of claims 1, 2, and 5-7 under 35 U.S.C. §112, first paragraph, and 35 U.S.C. §112, second paragraph, as it is Applicants belief that the language of claim 1 is appropriate. However, to move the prosecution forward and clarify the claim language to the Examiner, Applicants propose the amendment which alleviates rejections of claims 1, 2, and 5-7 under 35 U.S.C. §112, first paragraph, and 35 U.S.C. §112, second paragraph. It is to be appreciated that these amendments do not change the scope of the claims and are not made for the reasons of allowance. For the reasons stated, it is respectfully requested that 35 U.S.C. §112, first paragraph, and 35 U.S.C. §112, second paragraph rejections of claims 1, 2, and 5-7 be withdrawn.

Applicants have failed to determine 35 U.S.C. §112, first paragraph, or 35 U.S.C. §112, second paragraph, grounds for rejection of **claim 16** since no particular reference to claim 16 was made in the Office Action. If the Examiner maintains in rejecting claim 16 on either section 112 grounds, Applicants respectfully request the Examiner provide a concise statement containing the reasons for

rejection.

Claims Distinguish over Wagner

Claim 1 calls for among other elements: a semi-transparent sensor manufactured on a semi-transparent rigid substrate. Wagner describes a sensor which is positioned on a flexible substrate. (Fig. 34). The flexible substrate is top bonded to the laser. Contacts protrude through the substrate and establish electrical contact with the laser. To the contrary, claim 1 calls for a rigid substrate. Nowhere does Wagner disclose or suggest the rigid substrate which is bonded to the laser. It is therefore respectfully submitted that claim 1 and dependent claims 2 and 5-7 distinguish patentably and unobviously over Wagner.

Turning to **claim 2**, in addition to its relation to claim 1, claim 2 calls for the substrate which includes one of a quartz, silica, gallium arsenide, and glass substrate. This emphasizes the argument above regarding claim 1 and describes a rigid substrate. It is therefore respectfully submitted that **claim 2** distinguishes patentably and unobviously over Wagner.

Turning to **claim 5**, in addition to its relation to claim 1, claim 5 calls for the light producing device and the substrate to be connected together by a flip-chip process via solder bumps to define an air gap between the light producing device and the sensor. Wagner describes a sensor which is positioned on a flexible substrate. (Fig. 34). Flexible substrate is top bonded to the laser. An epoxy is used to bind two surfaces together. Nowhere does Wagner disclose or suggest bonding the rigid substrate to the laser via the solder bumps with a defined air gap. It is therefore respectfully submitted that **claim 5** distinguishes patentably and unobviously over Wagner.

Claim 16 calls for among other elements: a first via through the passivation/release layer to the first transparent/conductive layer, a second via through the passivation/release layer to the second transparent/conductive layer, and first and second metal layers, deposited in the first and second vias, providing contacts to the first and second transparent/conductive layers respectively. Wagner

describes a flexible substrate which is top bonded to the laser. Contacts protrude through the substrate and establish electrical contact with the laser. (Fig. 34). The contact has two sides: one side contacts the laser and the other side contacts the sensor. The contact is positioned on the side of the sensor which faces the substrate and opposite the laser. To the contrary, claim 16 calls for contacts which are positioned on the side of the sensor which faces the laser, e.g. the passivation layer, and opposite the substrate. It is therefore respectfully submitted that **claim 16** distinguishes patentably and unobviously over Wagner.

New claims 21-31 have been added to further alternatively claim certain aspects of Applicants concept.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application (Claims 1, 2, 5-7, 16 and 21-31) are now in condition for allowance.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Marina V. Zalevsky, at Telephone Number (216) 861-5582.

Respectfully submitted,

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6/20/05

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